What is claimed is:

1. A transparent, biaxially oriented polyester film with a base layer B, at least 80% by weight of which is composed of a thermoplastic polyester, and with at least one outer layer A, wherein

- the outer layer A is composed of a copolymer or of a mixture of homopolymers and copolymers, which contains ethylene 2,6-naphthalate units in a range of from 90 to 98% by weight and up to 10% by weight of ethylene terephthalate units, and/or units derived from cycloaliphatic or aromatic diols and/or dicarboxylic acids;
- the thickness of the outer layer A is more than 0.7 µm and makes up less than 25% by weight of the total film, and
- the T_g2 value of the polyester film is above the T_g2 value of the polyester for the base layer B but below the T_g2 value of the polyester for the outer layer A.

2. The transparent film as claimed in claim 1, wherein the copolymer or the mixture of homopolymers and copolymers in the outer layer A contains ethylene 2,6-naphthalate units in a range of from 91 to 97% by weight.

3. The transparent film as claimed in claim 1, wherein the outer layer A has a thickness of more than 0.8 µm and makes up less than 22% by weight of the total film.

4. The transparent film as claimed in claim 1, wherein the oxygen permeation of the film is below 85 $cm^3/(m^2 \cdot bar \cdot d)$.

5. The transparent film as claimed in claim 1, wherein the adhesion between the individual layers is greater than 0.5 N/25 mm.

6. The transparent film as claimed in claim 1 , which additionally comprises an intermediate layer Z having a thickness above 0.1 µm.

7. The transparent film as claimed in claim 1, the structure of which has three layers and comprises a base layer B, an outer layer A and an outer layer C.

8. The transparent film as claimed in claim 1, the structure of which has four layers and comprises an outer layer C, arranged thereupon a base layer B, and arranged thereupon an intermediate layer Z, and arranged thereupon an outer layer A.

9. The transparent film as claimed in claim 1, wherein at least one of the outer layers has been pigmented.

10. The transparent film as claimed in claim 1, wherein at least one side of the film has been treated with an electric corona discharge.

11. The transparent film as claimed in claim 1, wherein at least one side of the film has been in-line coated.

12. The transparent film as claimed in claim 1, which, at least on the outer layer A, has been metallized or ceramic-coated.

13. A process for producing the film as claimed in claim 1, encompassing the steps

- producing a film from base and outer layer(s) by coextrusion ,
- biaxially stretching the film, and
- heat-setting the stretched film,

which comprises carrying out the biaxial stretching by a longitudinal stretching of the film at a temperature in the range from 80 to 130°C and by a transverse stretching in the range from 90 to 150°C and using a longitudinal stretching ratio in the range from 2.5:1 to 6:1 and using a transverse stretching ratio in the range from 3.0:1 to 5.0:1.

14. The process as claimed in claim 13, wherein, for heat-setting, the stretched film is held for a period of from about 0.1 to 10 s at a temperature of from 150 to 250°C.

15. The process as claimed in claim 13, wherein cut material arising during film production is reused as regrind in the film production in amounts of up to 60% by weight based in each case on the total weight of the film.